former GM Linden NJD 002 188 690

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Hull & associates, inc.

February 28, 2011

Mr. Gary Greulich
New Jersey Department of Environmental Protection
Northern Regional Office
7 Ridgedale Avenue
Cedar Knolls, NJ 07927

RE: Remedial Action Progress Report No. 6 for the Industrial #1 Redevelopment Area Portion of the Former General Motors (GM) Linden Assembly Plant, 1016 West Edgar Road, Linden, Union County, New Jersey 07036; DUK059.701.0042.

Dear Mr. Greulich:

On May 28, 2009, the New Jersey Department of Environmental Protection (NJDEP) approved the New Jersey Remedial Action Workplan and RCRA Corrective Measures Proposal Addendum No. 2 (RAWP) for the Industrial #1 Redevelopment Area of the Former GM Linden Assembly Plant (Site; SRP PI# 014755; EA ID# SUB090001; BFO File Number: 20-09-24). The May 28, 2009 approval letter requested Remedial Action Progress Report for the Industrial #1 Redevelopment Area on/by November 30, 2009. Subsequent reports are submitted on a quarterly basis.

This letter constitutes Remedial Action Progress Report No. 6 for the Industrial #1 Redevelopment Area. Hull & Associates, Inc. (Hull) has prepared this report on behalf of Linden Development LLC (Linden Development) to summarize remedial activities completed on the Site between December 1, 2010 and February 28, 2011.

Requirements, according to N.J.A.C. 7:26E-6.6, are shown below in ***bold italics***, with Hull/Linden Development's update following. The report certification required by N.J.A.C. 7:26E-1.5 is included in Attachment A.

1. ***NJDEP requires a description of each planned remedial action***
   - ***i. scheduled to be initiated or completed within the reporting period***
   - ***ii. actually initiated or completed during the reporting period; and***
   - ***iii. scheduled but not initiated or not completed during the reporting period, including the reasons for the noncompliance with the approved schedule.***

Soil

As outlined in the approved RAWP, the remedial activities for soils on the Industrial #1 Redevelopment Area consist of the following:

a. Establishing deed restrictions or environmental covenants to maintain commercial/industrial land use at the Site;

b. Regrading the site to achieve the grade necessary to support the proposed redevelopment;



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c. Constructing building slabs, parking areas and roadways and placing one foot of clean soil over geotextile fabric in future greenspaces to preclude direct contact exposures to future receptor populations and/or provide cover to historical fill material; and

d. Surveying to demonstrate that all areas are covered with engineering controls (e.g., building slabs, parking areas and roadways) or one foot of clean soil.

These remedial activities are directly related to construction activities associated with the future redevelopment at the Site which are dependent upon finalization of agreements with end users. Linden Development has been working throughout the reporting period to establish agreements with end users to ultimately occupy various portions of the Site. Given that end user agreements have not been established, the construction activities described in the RAWP have not yet been initiated.

During the reporting period, Linden Development imported structural fill materials from off-site sources for use during the redevelopment consistent with the RAWP and the Revised Soil and Concrete Reuse Proposal (Revision 1.0) approved by NJDEP. Materials imported prior to and during the reporting period are summarized in Table 1.

Groundwater
The RAWP for the Industrial #1 Redevelopment Area was limited to soils. Groundwater actions, if any, are related to resolution of the disputed groundwater issue between the Site and neighboring Merck Pharmaceutical facility. Evaluation of the disputed groundwater issue is ongoing.

Storm Sewer (AOI-18)
Remedial activities associated with AOI-18 are complete, as documented in Remedial Action Progress Report No. 1 (November 2009).

***2. NJDEP requires discussion of problems and delays in the implementation of the RAWP, which should include proposals for corrections.***

As discussed above, remedial activities are directly related to construction activities associated with the future redevelopment at the Site which are dependent upon establishment of agreements with end users. Given current economic conditions, the construction activities described in the RAWP will not be implemented until redevelopment deals with end users are established.

Linden Development is continuing to pursue agreements with end users for the Industrial #1 Redevelopment Area. In the interim, conditions at the Site are stable given that GM's original cover types (asphalt, building pads, etc.) remain intact.

***3. NJDEP requires proposals for a deviation from, or modification to, the approved RAWP.***

No deviations from, or modifications to, the approved RAWP are planned or required at this time.

4. ***NJDEP requires submittal of a revised schedule pursuant to N.J.A.C. 7:26E-6.5, to reflect the changes as noted in 1 through 3 above.***

As noted above, establishment of agreements with end users is the driving force behind the redevelopment of the Site and implementation of the RAWP. Linden Development continues to pursue agreements with end users and will provide updates in subsequent quarterly reports. The next progress report is scheduled to be submitted on or before May 31, 2011.

5. ***NJDEP requires an updated status of all permit applications relative to the critical path schedule.***

The permits required for initiation of the remedial activities are summarized below.

| Permit/Approval Type | Status | Notes |
|---|---|---|
| Planning Board Approval | Approved 11/17/08 | Site plan approved by City of Linden Planning Board |
| NPDES Permit (Storm Water) | Approved 9/16/09 | NPDES Permit No. 0088323 |
| Soil Conservation District | Approved 9/16/09 | Approved by Somerset-Union Conservation District |

6. ***NJDEP requires a listing of each remedial action to be performed during the next reporting period.***

No remedial activities are scheduled during the next reporting period. As noted above, establishment of agreements with end users is the driving force behind the redevelopment of the Site and implementation of the RAWP. Linden Development continues to pursue agreements with end users and will provide updates in subsequent quarterly reports. The next progress report is scheduled to be submitted on or before May 31, 2011.

7. ***NJDEP requires costs of each remedial action***
   - ***i. Annual summary of all remedial action costs incurred to date; and***
   - ***ii. Revised cost estimate for remedial actions remaining to be performed.***

Given that significant construction and remedial implementation has not yet commenced, no remedial costs have been accrued, with the exception of minor costs for the storm sewer cleaning (i.e., approximately $7,000).

The cost estimate for completing remedial activities remains consistent with that presented in the RAWP (i.e., approximately $11,900,000 for earthwork and construction of engineering controls).

8. ***NJDEP requires a tabulation of sampling results (according to N.J.A.C. 7:26E-3.13(c)3) received during the reporting period and a summary of the data and any conclusions, presented in a format consistent with N.J.A.C. 7:26E-4.8.***

During the reporting period, Linden Development imported structural fill materials from off-site sources for use during the redevelopment consistent with the RAWP and the Revised Soil and Concrete Reuse Proposal (Revision 1.0) approved by NJDEP. Soil analytical

results associated with the materials imported during this reporting period are tabulated in Attachment B.

9. ***NJDEP requires a summary of active groundwater remedial actions***
   - ***i. groundwater elevation maps with groundwater flow shown immediately before and during active groundwater remediation;***
   - ***ii. graphs depicting changes in concentrations over time for all impacted wells as well as all down-gradient wells;***
   - ***iii. summary of volume of water treated since last reporting period and the total volume treated since active remedial action commenced; and***
   - ***iv. Summary of groundwater contamination, indicating either that contamination remains above applicable standards (include a proposal detailing additional remedial actions) or that concentrations are below applicable standards.***

The RAWP for the Industrial #1 Redevelopment Area was limited to soils only. Therefore, this section is not applicable.

10. ***NJDEP requires a summary of natural remediation groundwater remedial actions***
    - ***i. Summary table of the groundwater monitoring results collected; and***
    - ***ii. Conclusions whether data indicate that natural remediation is no longer appropriate (must then also submit a revised RAWP)***

The RAWP for the Industrial #1 Redevelopment Area was limited to soils only. Therefore, this section is not applicable.

11. ***NJDEP requires a description of all wastes generated as a result of the remedial action***
    - ***i. Tabulation of waste characterization samples collected, including the physical state of the material, volume, number of samples, analyses performed and results;***
    - ***ii. Listing of types and quantities of waste generated by the remedial action during the reporting period as well as to date;***
    - ***iii. Name of the disposal facility used;***
    - ***iv. Transporters' dates of disposal; and***
    - ***v. Manifest numbers of each waste shipment.***

No wastes were generated during the reporting period.

12. ***NJDEP requires that any additional support documentation that is available also be provided (photos, etc.).***

Given that the majority of the remedial activities have not yet been implemented, no additional support documentation is available.

The next scheduled remedial action progress report will include remedial actions completed between March 1 and May 31, 2011. Please feel free to contact Bill Dennis at (412) 446-0315 with any questions regarding the update provided herein.

Sincerely,

WH Dennis III

Bill Dennis
Senior Project Manager

Attachments

ct: Brian Strohl – Linden Development, LLC
Clifford Ng – U.S. EPA Region 2

# TABLES

**LINDEN DEVELOPMENT LLC SITE (FORMER GM LINDEN ASSEMBLY PLANT)**
**1016 WEST EDGAR ROAD, LINDEN, NJ**
**QUARTERLY REPORT NO. 6 - INDUSTRIAL NO. 1 REDEVELOPMENT AREA**

**TABLE 1**
**SUMMARY OF FILL MATERIALS IMPORTED AS OF FEBRUARY 2011**

| Import Date | Source | Supplier | Quantity | Material Type | Anticipated Site Use |
|---|---|---|---|---|---|
| **Soils and Crushed Concrete - Imported Prior to Current Reporting Period** | | | | | |
| Pre-February 2010 | City of Rahway, NJ - Former firing range soil stockpile | City of Rahway, NJ | 800 cy | Soils | Structural fill to be covered by engineering controls |
| Pre-February 2010 | City of Linden, NJ - 2300 S. Wood Street - soil stockpile from City's Parks Dept. | City of Linden, NJ | 2,865 cy | Soils | Structural fill to be covered by engineering controls |
| April / May 2010 | New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project | Pure Earth, Inc. | 2,973 cy | Soils | Structural fill to be covered by engineering controls |
| April / May 2010 | Newark Public Schools Stadium - excess soils from construction project | AWT Environmental Services, Inc. | 3,397 cy | Soils | Structural fill to be covered by engineering controls |
| May 2010 | Newark Brick Tower - Residential Tower Demolition - processed backfill material | DEMREX and Altchem Environmental | 15,680 cy | Soils/Crushed Concrete | Structural fill to be covered by engineering controls |
| June 2010 | New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project | Pure Earth, Inc. | 1,178 cy | Soils | Structural fill to be covered by engineering controls |
| June 2010 | City of Linden, NJ - Library Site - excess soils from construction project | City of Linden, NJ | 2,300 cy | Soils | Structural fill to be covered by engineering controls |
| July 2010 | New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project | Pure Earth, Inc. | 1,516 cy | Soils | Structural fill to be covered by engineering controls |
| 8/24/10 | New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project | Pure Earth, Inc. | 658 cy | Soils | Structural fill to be covered by engineering controls |
| 9/23/10 | New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project | Pure Earth, Inc. | 567 cy | Soils | Structural fill to be covered by engineering controls |
| 9/27/2010 | Weldon Materials - crushed stone (virgin source) | Weldon Materials | 142 cy | Crushed Stone | Unrestricted (Virgin Source Material) |
| 9/29/2010 | Weldon Materials - crushed stone (virgin source) | Weldon Materials | 55 cy | Crushed Stone | Unrestricted (Virgin Source Material) |
| 10/5/10 | New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project | Pure Earth, Inc. | 699 cy | Soils | Structural fill to be covered by engineering controls |
| 10/19/10 | New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project | Pure Earth, Inc. | 655 cy | Soils | Structural fill to be covered by engineering controls |
| | | ***Subtotal:*** | ***33,485 cy*** | | |

LINDEN DEVELOPMENT LLC SITE (FORMER GM LINDEN ASSEMBLY PLANT)
1016 WEST EDGAR ROAD, LINDEN, NJ
QUARTERLY REPORT NO. 6 - INDUSTRIAL NO. 1 REDEVELOPMENT AREA

TABLE 1
SUMMARY OF FILL MATERIALS IMPORTED AS OF FEBRUARY 2011

| Import Date | Source | Supplier | Quantity | Material Type | Anticipated Site Use |
|---|---|---|---|---|---|
| **Soils and Crushed Concrete - Imported During Current Reporting Period** | | | | | |
| 12/15/10 | New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project | Pure Earth, Inc. | 328 cy | Soils | Structural fill to be covered by engineering controls |
| 12/16/10 | New 121st. Police Precinct -970 Sanders Street, Staten Island, NY - excess soils from construction project | Pure Earth, Inc. | 165 cy | Soils | Structural fill to be covered by engineering controls |
| | | ***Subtotal:*** | ***493 cy*** | | |
| | **Total for Soils and Crushed Concrete Imported to Date:** | | **33,978 cy** | | |
| **Asphalt Millings - Imported Prior to Current Reporting Period** | | | | | |
| Pre-February 2010 | City of Linden, NJ - Residential Streets - asphalt millings | City of Linden, NJ | 1,434 cy | Asphalt Millings | Subgrade material for future paved areas |
| | | ***Subtotal:*** | ***1,434 cy*** | | |
| **Asphalt Millings - Imported During Current Reporting Period** | | | | | |
| NA | None during current reporting period | NA | 0 | | |
| | | ***Subtotal:*** | ***0 cy*** | | |
| | **Total for Asphalt Millings Imported to Date:** | | **1,434 cy** | | |

# ATTACHMENT A

## Report Certification

## Certification

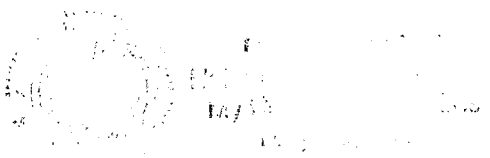
**Linden Development, LLC**
**ISRA Case Number E20040531**

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Linden Development, LLC
By: _____
William J. DeBoer, Executive V.P.

Date: 2/23/11

Sworn to and subscribed to before
me on this 23rd day
of February, 2011
_____
Notary



# ATTACHMENT B

## Analytical Results for Samples of Fill Material Imported During this Reporting Period

**New 121st Police Precinct - 970 Sanders Street, Staten Island, NY**
**Excess Soils from Construction Project**
**Table B-1 - Summary of Analytical Results (Detected Analytes Only)**

| Analyte | Units | Sample ID | TP-1C | | TP-1G (4') | | TP-2C | | TP-2G (4') | | TP-3C | | TP-3G (4.5') | | TP-4C | | TP-4G (4.5') | | TP-6C | | TP-6G (4.5') | | TP-5C | | TP-5G (5') | | TP-7C | | TP-7G (4.5') | | TP-8C | | TP-8G (4') | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Date | 12/23/2009 | | 12/23/2009 | | 12/23/2009 | | 12/23/2009 | | 12/23/2009 | | 12/23/2009 | | 12/23/2009 | | 12/23/2009 | | 12/23/2009 | | 12/23/2009 | | 12/24/2009 | | 12/24/2009 | | 12/24/2009 | | 12/24/2009 | | 12/24/2009 | | 12/24/2009 | |
| | | CasNo | | Q | | Q | | Q | | Q | | Q | | Q | | Q | | Q | | Q | | Q | | Q | | Q | | Q | | Q | | Q | | Q |
| **VOCs** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acetone | PPB | 67-64-1 | NT | | 95 | C | NT | | 5.8 | U | NT | | 5.5 | U | NT | | 5.6 | U | NT | | 5.9 | U | NT | | 6 | U | NT | | 5.8 | U | NT | | 5.7 | U |
| Methylene chloride | PPB | 75-09-2 | NT | | 37 | B | NT | | 29 | B | NT | | 22 | B | NT | | 21 | B | NT | | 38 | B | NT | | 15 | B | NT | | 23 | B | NT | | 35 | B |
| **SVOCs** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | PPB | 91-57-6 | 130 | U | NT | | 260 | U | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 100 | J | NT | | 94 | J | NT | | 130 | U | NT | |
| Acenaphthene | PPB | 83-32-9 | 130 | U | NT | | 260 | U | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 540 | | NT | | 130 | U | NT | | 130 | U | NT | |
| Acenaphthylene | PPB | 208-96-8 | 130 | U | NT | | 260 | U | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 22 | J | NT | | 130 | U | NT | | 130 | U | NT | |
| Anthracene | PPB | 120-12-7 | 130 | U | NT | | 50 | J | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 530 | | NT | | 130 | U | NT | | 130 | U | NT | |
| Benzo(a)anthracene | PPB | 56-55-3 | 18 | J | NT | | 350 | | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 890 | | NT | | 130 | U | NT | | 53 | J | NT | |
| Benzo(a)pyrene | PPB | 50-32-8 | 19 | J | NT | | 280 | | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 810 | | NT | | 130 | U | NT | | 62 | J | NT | |
| Benzo(b)fluoranthene | PPB | 205-99-2 | 130 | U | NT | | 410 | | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 1100 | | NT | | 130 | U | NT | | 79 | J | NT | |
| Benzo(g,h,i)perylene | PPB | 191-24-2 | 130 | U | NT | | 250 | J | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 540 | | NT | | 130 | U | NT | | 64 | J | NT | |
| Benzo(k)fluoranthene | PPB | 207-08-9 | 130 | U | NT | | 110 | J | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 430 | | NT | | 130 | U | NT | | 28 | J | NT | |
| Bis(2-ethylhexyl)phthalate | PPB | 117-81-7 | 130 | U | NT | | 120 | J | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 120 | U | NT | | 29 | J | NT | | 77 | J | NT | |
| Butyl benzyl phthalate | PPB | 85-68-7 | 130 | U | NT | | 260 | U | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 120 | U | NT | | 98 | J | NT | | 130 | U | NT | |
| Carbazole | PPB | 86-74-8 | 130 | U | NT | | 260 | U | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 220 | | NT | | 130 | U | NT | | 130 | U | NT | |
| Chrysene | PPB | 218-01-9 | 130 | U | NT | | 280 | | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 830 | | NT | | 130 | U | NT | | 71 | J | NT | |
| Dibenzo(a,h)anthracene | PPB | 53-70-3 | 130 | U | NT | | 260 | U | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 160 | | NT | | 130 | U | NT | | 130 | U | NT | |
| Diethyl phthalate | PPB | 84-66-2 | 130 | U | NT | | 260 | U | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 120 | U | NT | | 28 | J | NT | | 130 | U | NT | |
| Di-n-butyl phthalate | PPB | 84-74-2 | 130 | U | NT | | 260 | U | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 120 | U | NT | | 24 | J | NT | | 130 | U | NT | |
| Fluoranthene | PPB | 206-44-0 | 130 | U | NT | | 500 | | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 2400 | | NT | | 130 | U | NT | | 96 | J | NT | |
| Fluorene | PPB | 86-73-7 | 130 | U | NT | | 260 | U | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 480 | | NT | | 130 | U | NT | | 130 | U | NT | |
| Indeno(1,2,3-c,d)pyrene | PPB | 193-39-5 | 130 | U | NT | | 260 | | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 670 | | NT | | 130 | U | NT | | 61 | J | NT | |
| Naphthalene | PPB | 91-20-3 | 130 | U | NT | | 260 | U | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 210 | | NT | | 43 | J | NT | | 130 | U | NT | |
| Phenanthrene | PPB | 85-01-8 | 130 | U | NT | | 190 | J | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 1900 | | NT | | 130 | U | NT | | 29 | J | NT | |
| Pyrene | PPB | 129-00-0 | 23 | J | NT | | 450 | | NT | | 270 | U | NT | | 130 | U | NT | | 130 | U | NT | | 1500 | | NT | | 130 | U | NT | | 74 | J | NT | |
| **Pesticides** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | PPB | 72-54-8 | 3 | | NT | | 5.2 | | NT | | 2.2 | J | | | 14 | | NT | | 2.2 | U | NT | | 30 | | NT | | 1.9 | J | NT | | 5.9 | | NT | |
| 4,4'-DDE | PPB | 72-55-9 | 2.1 | U | NT | | 1.7 | J | NT | | 2.3 | U | | | 2.5 | | NT | | 2.2 | U | NT | | 4.3 | | NT | | 2.2 | U | NT | | 2.2 | U | NT | |
| 4,4'-DDT | PPB | 50-29-3 | 2.1 | U | NT | | 2.1 | U | NT | | 2.3 | U | | | 6.1 | | NT | | 2.2 | U | NT | | 2.1 | U | NT | | 2.2 | U | NT | | 2.2 | U | NT | |
| alpha-Chlordane | PPB | 5103-71-9 | 2.1 | U | NT | | 4.4 | | NT | | 2.3 | U | NT | | 2.2 | U | NT | | 2.2 | U | NT | | 2.1 | U | NT | | 2.2 | U | NT | | 2.2 | U | NT | |
| gamma-Chlordane | PPB | 5103-74-2 | 2.1 | U | NT | | 0.89 | J | NT | | 2.3 | U | NT | | 2.2 | U | NT | | 2.2 | U | NT | | 2.1 | U | NT | | 2.2 | U | NT | | 2.2 | U | NT | |
| **Metals** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | PPM | 7429-90-5 | 6840 | | NT | | 5710 | | NT | | 5560 | | NT | | 5490 | | NT | | 5900 | | NT | | 4830 | | NT | | 6390 | | NT | | 4610 | | NT | |
| Arsenic | PPM | 7440-38-2 | 3.93 | | NT | | 3.27 | | NT | | 3.62 | | NT | | 2.63 | | NT | | 2.29 | | NT | | 3.54 | | NT | | 3.93 | | NT | | 2.35 | | NT | |
| Barium | PPM | 7440-39-3 | 40.5 | | NT | | 31.3 | | NT | | 31.2 | | NT | | 23.9 | | NT | | 25.2 | | NT | | 20.4 | | NT | | 34.4 | | NT | | 21.9 | | NT | |
| Calcium | PPM | 7440-70-2 | 5710 | | NT | | 19000 | | NT | | 3020 | | NT | | 1200 | | NT | | 5670 | | NT | | 5230 | | NT | | 4590 | | NT | | 247 | | NT | |
| Chromium | PPM | 7440-47-3 | 15.2 | | NT | | 10.9 | | NT | | 18.2 | | NT | | 8.8 | | NT | | 9.34 | | NT | | 9.19 | | NT | | 9.64 | | NT | | 8.41 | | NT | |
| Cobalt | PPM | 7440-48-4 | 0.428 | U | NT | | 0.43 | U | NT | | 0.808 | | NT | | 0.401 | U | NT | | 0.425 | U | NT | | 0.395 | U | NT | | 0.418 | U | NT | | 0.412 | U | NT | |
| Copper | PPM | 7440-50-8 | 12.6 | | NT | | 13.9 | | NT | | 11.9 | | NT | | 7.84 | | NT | | 6.36 | | NT | | 13 | | NT | | 7.94 | | NT | | 6 | | NT | |
| Iron | PPM | 7439-89-6 | 15800 | | NT | | 12700 | | NT | | 13500 | | NT | | 11100 | | NT | | 13000 | | NT | | 12400 | | NT | | 12200 | | NT | | 9040 | | NT | |
| Lead | PPM | 7439-92-1 | 13.2 | | NT | | 13.4 | | NT | | 33.2 | | NT | | 6.35 | | NT | | 5.53 | | NT | | 17.5 | | NT | | 8.55 | | NT | | 4.61 | | NT | |
| Magnesium | PPM | 7439-95-4 | 4680 | | NT | | 9390 | | NT | | 2370 | | NT | | 1920 | | NT | | 4810 | | NT | | 3720 | | NT | | 1580 | | NT | | 1320 | | NT | |
| Manganese | PPM | 7439-96-5 | 204 | | NT | | 174 | | NT | | 377 | | NT | | 113 | | NT | | 96.7 | | NT | | 113 | | NT | | 138 | | NT | | 124 | | NT | |
| Mercury | PPM | 7439-97-6 | 0.0113 | U | NT | | 0.0189 | | NT | | 0.039 | | NT | | 0.0102 | U | NT | | 0.0111 | U | NT | | 0.0287 | | NT | | 0.0176 | | NT | | 0.0101 | U | NT | |
| Nickel | PPM | 7440-02-0 | 12.1 | | NT | | 10.4 | | NT | | 25.4 | | NT | | 11.5 | | NT | | 7.45 | | NT | | 11.8 | | NT | | 8.81 | | NT | | 7.25 | | NT | |
| Potassium | PPM | 7440-09-7 | 1780 | | NT | | 1690 | | NT | | 1140 | | NT | | 1170 | | NT | | 1270 | | NT | | 1150 | | NT | | 1260 | | NT | | 972 | | NT | |
| Sodium | PPM | 7440-23-5 | 265 | | NT | | 206 | | NT | | 232 | | NT | | 274 | | NT | | 224 | | NT | | 313 | | NT | | 679 | | NT | | 332 | | NT | |
| Vanadium | PPM | 7440-62-2 | 22.9 | | NT | | 21.6 | | NT | | 18.8 | | NT | | 14.5 | | NT | | 16.4 | | NT | | 17.4 | | NT | | 18.1 | | NT | | 13.5 | | NT | |
| Zinc | PPM | 7440-66-6 | 29.9 | | NT | | 31.4 | | NT | | 62.1 | | NT | | 24.7 | | NT | | 21.6 | | NT | | 30.6 | | NT | | 26 | | NT | | 20.8 | | NT | |
| **Wet Chemistry** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chromium, Trivalent | PPM | 16065-83-1 | 15.2 | | NT | | 10.9 | | NT | | 18.2 | | NT | | 8.8 | | NT | | 9.34 | | NT | | 9.19 | | NT | | 9.64 | | NT | | 8.41 | | NT | |
| Percent Moisture | wt% | | 13.2 | | 14.5 | | 10.9 | | 15.2 | | 15.5 | | 9.41 | | 13.6 | | 11.5 | | 14.5 | | 17 | | 9.63 | | 16 | | 13.2 | | 13.7 | | 13 | | 12.3 | |
| pH | pH Unit | | 7.95 | H | NT | | 8.09 | H | NT | | 7.92 | H | NT | | 7.98 | H | NT | | 7.86 | H | NT | | 8.35 | | NT | | 6.85 | | NT | | 7.68 | | NT | |
| **TCLP Metals** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Barium | PPM | 7440-39-3 | 1.15 | | NT | | 0.964 | | NT | | 0.912 | | NT | | 0.83 | | NT | | 0.938 | | NT | | 0.941 | | NT | | 0.993 | | NT | | 0.842 | | NT | |
| Lead | PPM | 7439-92-1 | 0.731 | | NT | | 0.0681 | | NT | | 0.12 | | NT | | 0.0329 | J | NT | | 0.00598 | J | NT | | 0.139 | | NT | | 0.056 | | NT | | 0.00826 | J | NT | |

Notes:
C - Calibration %RSD/%D exceeded for non-COC analytes
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New 121st Police Precinct - 970 Sanders Street, Staten Island, NY
Excess Soils from Construction Project
Table B-1 - Summary of Analytical Results (Detected Analytes Only)

| Analyte | Units | Sample ID | TP-9C | | TP-9G (4') | | TP-10C | | TP-10G (1.5') | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Date | 12/24/2009 | | 12/24/2009 | | 12/24/2009 | | 12/24/2009 | |
| | | CasNo | | Q | | Q | | Q | | Q |
| **VOCs** | | | | | | | | | | |
| Acetone | PPB | 67-64-1 | NT | | 5.7 | U | NT | | 5.6 | U |
| Methylene chloride | PPB | 75-09-2 | NT | | 22 | B | NT | | 18 | B |
| **SVOCs** | | | | | | | | | | |
| 2-Methylnaphthalene | PPB | 91-57-6 | 130 | U | NT | | 270 | U | NT | |
| Acenaphthene | PPB | 83-32-9 | 130 | U | NT | | 70 | J | NT | |
| Acenaphthylene | PPB | 208-96-8 | 130 | U | NT | | 270 | U | NT | |
| Anthracene | PPB | 120-12-7 | 130 | U | NT | | 260 | J | NT | |
| Benzo(a)anthracene | PPB | 56-55-3 | 130 | U | NT | | 670 | | NT | |
| Benzo(a)pyrene | PPB | 50-32-8 | 130 | U | NT | | 530 | | NT | |
| Benzo(b)fluoranthene | PPB | 205-99-2 | 130 | U | NT | | 660 | | NT | |
| Benzo(g,h,i)perylene | PPB | 191-24-2 | 130 | U | NT | | 320 | | NT | |
| Benzo(k)fluoranthene | PPB | 207-08-9 | 130 | U | NT | | 290 | | NT | |
| Bis(2-ethylhexyl)phthalate | PPB | 117-81-7 | 34 | J | NT | | 270 | U | NT | |
| Butyl benzyl phthalate | PPB | 85-68-7 | 130 | U | NT | | 270 | U | NT | |
| Carbazole | PPB | 86-74-8 | 130 | U | NT | | 48 | J | NT | |
| Chrysene | PPB | 218-01-9 | 130 | U | NT | | 620 | | NT | |
| Dibenzo(a,h)anthracene | PPB | 53-70-3 | 130 | U | NT | | 130 | J | NT | |
| Diethyl phthalate | PPB | 84-66-2 | 130 | U | NT | | 270 | U | NT | |
| Di-n-butyl phthalate | PPB | 84-74-2 | 130 | U | NT | | 270 | U | NT | |
| Fluoranthene | PPB | 206-44-0 | 22 | J | NT | | 1700 | | NT | |
| Fluorene | PPB | 86-73-7 | 130 | U | NT | | 120 | J | NT | |
| Indeno(1,2,3-c,d)pyrene | PPB | 193-39-5 | 130 | U | NT | | 410 | | NT | |
| Naphthalene | PPB | 91-20-3 | 130 | U | NT | | 270 | U | NT | |
| Phenanthrene | PPB | 85-01-8 | 130 | U | NT | | 1100 | | NT | |
| Pyrene | PPB | 129-00-0 | 130 | U | NT | | 1100 | | NT | |
| **Pesticides** | | | | | | | | | | |
| 4,4'-DDD | PPB | 72-54-8 | 6.1 | | NT | | 3.7 | | NT | |
| 4,4'-DDE | PPB | 72-55-9 | 1.8 | J | NT | | 6.5 | | NT | |
| 4,4'-DDT | PPB | 50-29-3 | 4.1 | | NT | | 20 | | NT | |
| alpha-Chlordane | PPB | 5103-71-9 | 2.2 | U | NT | | 2.1 | J | NT | |
| gamma-Chlordane | PPB | 5103-74-2 | 2.2 | U | NT | | 1.2 | J | NT | |
| **Metals** | | | | | | | | | | |
| Aluminum | PPM | 7429-90-5 | 10200 | | NT | | 8480 | | NT | |
| Arsenic | PPM | 7440-38-2 | 4.52 | | NT | | 4.47 | | NT | |
| Barium | PPM | 7440-39-3 | 50.7 | | NT | | 56 | | NT | |
| Calcium | PPM | 7440-70-2 | 1020 | | NT | | 6350 | | NT | |
| Chromium | PPM | 7440-47-3 | 15.5 | | NT | | 40.4 | | NT | |
| Cobalt | PPM | 7440-48-4 | 0.42 | U | NT | | 1.04 | | NT | |
| Copper | PPM | 7440-50-8 | 15.7 | | NT | | 25.8 | | NT | |
| Iron | PPM | 7439-89-6 | 16400 | | NT | | 14800 | | NT | |
| Lead | PPM | 7439-92-1 | 15.2 | | NT | | 50.3 | | NT | |
| Magnesium | PPM | 7439-95-4 | 3010 | | NT | | 5260 | | NT | |
| Manganese | PPM | 7439-96-5 | 365 | | NT | | 225 | | NT | |
| Mercury | PPM | 7439-97-6 | 0.0213 | | NT | | 0.0633 | | NT | |
| Nickel | PPM | 7440-02-0 | 13.1 | | NT | | 78.5 | | NT | |
| Potassium | PPM | 7440-09-7 | 1720 | | NT | | 1080 | | NT | |
| Sodium | PPM | 7440-23-5 | 195 | | NT | | 132 | | NT | |
| Vanadium | PPM | 7440-62-2 | 27.4 | | NT | | 22.6 | | NT | |
| Zinc | PPM | 7440-66-6 | 41.8 | | NT | | 68.4 | | NT | |
| **Wet Chemistry** | | | | | | | | | | |
| Chromium, Trivalent | PPM | 16065-83-1 | 15.5 | | NT | | 40.4 | | NT | |
| Percent Moisture | wt% | | 12.5 | | 12.4 | | 13.3 | | 11.1 | |
| pH | pH Unit | | 6.88 | | NT | | 7.88 | | NT | |
| **TCLP Metals** | | | | | | | | | | |
| Barium | PPM | 7440-39-3 | 0.967 | | NT | | 1.23 | | NT | |
| Lead | PPM | 7439-92-1 | 0.033 | J | NT | | 0.0718 | | NT | |

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